ABSTRACT

The major objective is to provide a fluorocarbon film wherein fine voids are formed by a step (SA1) for introducing a mixed gas containing a first carbon fluoride gas and a second carbon fluoride gas on a substrate placed inside a chamber, and depositing a fluorocarbon film on the substrate; and a step (SA2) for forming voids in the fluorocarbon film by selectively removing volatile components contained in the fluorocarbon film are included and especially in the step (SA2) for forming voids, it is preferable to include a step for cleaning the fluorocarbon film with a supercritical fluid.